

EDS

Engineering,
GM DAEWOO Auto & Technology
Standards

ZINC - PHOSPHATED COATING WEIGHT MEASUREMENT METHOD

EDS-T-7936

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VERSION: 2

1. PURPOSE

This standard aims at measuring weight of coating formed on the test piece after it passes the pre-treatment *chemical process* of the paint shop.

2. SCOPE

This standard applies to CRS steel that is coated at the pre-treatment *chemical process* of the paint shop.

3. TEST APPARATUS

3.1. Coated test piece- test piece that has passed the pre-treatment chemical process

3.2. Test apparatus

3.2.1. Solution reagent

3.2.2. Drying oven

3.2.3. Thermometer

3.2.4. Scale (capable of measuring down to 1/10,000g)

3.2.5. Hot plate *or a thermostat*

3.2.6. *Acetone*

3.2.7. Vernier calipers

3.2.8. Desiccator

3.2.9. Scissors

4. TEST PIECE CONDITION AND PREPARATION

4.1. Test piece preparation

The test piece is prepared by passing the bare CRS piece through the pre-treatment line of the paint shop. It shall be constructed to more than meet requirements for each process.

4.2. Solution reagent preparation

4.2.1. *Production of CRS coating weight solution reagent*

Put 50g of Chromium(VI)Oxide(CrO_3) into a 1000 ml beaker, and fill it with pure water to reach 1000 ml, and stir it until it is completely melted on the hot plate.

4.2.2. *Production of aluminum or zinc coating weight solution reagent*

Put 276 ml of the Ammonium Hydroxide(NH_4OH , 29%) solution & 1.0g of Chromium(VI)Oxide(CrO_3) to 1000 ml beaker and dilute it with water to reach 1000 ml. Then, stir it until it is completely melted.